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# NOTES ON GEOGRAPHIC VARIATIONS IN THE GENUS MACRONYX WITH DESCRIPTION OF TWO NEW RACES.

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The purely African genus of pipits forming the subject of the present note is peculiar in that it contains four species, each of which has a restricted range (capensis, sharpei, flavicollis, and aurantiigula), one with two spatially distant races (ameliae and wintoni), and only one form with a very wide, discontinuous distribution. That one, M. croceus, is the bird under immediate consideration. While studying the series of this Yellow-throated Long-claw in the Frick, Roosevelt, and Loveridge collections I became aware of the fact that the birds of southeastern Africa were different from those to the north and northwest. This difference was a dimensional one with regard to the bill, the large-billed form being the one found in Natal and adjacent regions of southeastern Africa. No name appears to be available for it, and I therefore propose to call it

#### Macronyx croceus vulturnus, subsp. nov.

Type.—U. S. Nat. Mus. no. 109591; adult male, collected in Natal, South Africa, by E. H. Richards.

Subspecific characters.—Similar to M. croceus croceus, but with the bill noticeably longer, the culmen (in the males) measuring from 17.5 to 21.0 mm. as against 15.0 to 17.5 mm. in the nominate form.

Range.—Natal and adjacent regions of southeastern Africa. Remarks.—Gyldenstlope (1924, p. 81) writes that in the Royal Natural History Museum in Stockholm, '. . . there are a few specimens of M. croceus collected at Port Natal. These agree in color with East and Central African birds but have longer bills, measuring 17–19 mm.'

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Although the birds of East, Central, and West Africa vary greatly among themselves, I do not see how any races can be maintained other than fülleborni of northern Nyasaland, Katanga, and Northern Rhodesia, west to Benguella. Thus, Gyldenstolpe (loc. cit.) finds that specimens of croceus from '. . . . the Central African Lakes District, Uganda, east to Elgon and Kavirondo, are, however, somewhat larger than those from Kenya Colony and Tanganyika Territory . . . .', but he finds that his Congo birds are referable to typical croceus, of which he had seen two Senegalese specimens. On the other hand, van Someren (1922, p. 179) writes that '. . . eastern birds are larger than typical ones . . . examined. More material required.' I have examined a series of some 28 birds from Gaboon, Uganda, Ruanda, Kenya Colony, and Tanganvika Territory, besides vulturnus of Natal, and do not find any constant size differences that are correlated with geography.

The races of the Yellow-throated Long-claw may be summarized as follows:

#### M. croceus croceus (Vieillot)

Senegal, Nigeria, Gold Coast, and Bahr el Ghazal district of the Sudan, south through Cameroon to Gaboon, through the Belgian Congo to the northern part of the Katanga, and through Uganda and Kenya Colony to Ruanda, Tanganyika Territory (except the southwestern part), and Mozambique. Just how far south this race extends is not yet definitely known, but it probably intergrades with *vulturnus* in southern Mozambique and Gazaland.

#### M. croceus vulturnus

Natal and adjacent parts of the Transvaal, Pondoland, the eastern Cape Province (where, however, it is rare), Zululand, probably Swaziland, and Amatongaland in southern Mozambique, whence, however, I have seen no material.

#### M. croceus fulleborni Reichwow

From the Unika highlands north of Lake Nyasa, and adjacent parts of southwestern Tanganyika Territory, west through the Katanga and Northern Rhodesia to Benguella in Angola. Sclater (1930, p. 348) writes that this may be a distinct species

as it is said to occur together with the typical form in the Katanga. This is a point that I cannot decide as I have no material from that region, but a specimen from Nyanza, Belgian Congo (west side of Lake Tanganyika) is somewhat intermediate in nature between *croceus* and *fülleborni*.

Gyldenstolpe (loc. cit.) notes that two specimens from Mossamedes differ from all the rest of his series of M. c. croceus in lacking the stripes on the sides of the body and the sides of the breast. They are slightly darker on the upperparts than croceus and differ from fülleborni in having pure yellow underparts. If these characters be found to be constant, the Mossamedes birds will be worth naming as a fourth race. However, it may be noted that I have seen specimens from Ruanda and Uganda that also lacked these stripes, but were pure yellow below. I have assumed them to be slightly intermediate in character between croceus and fülleborni, but nearer the former. As far as I know there are no Macronyx croceus south of Mossamedes (in Damaraland or Namaqualand, or in Bechuanaland to the east) so that on geographic grounds it would be difficult to account for intermediacy in Mossamedes.

Of all the species of the genus Macronyx perhaps the least well known is M. aurantiigula. This form is of interest in that it serves to connect two such diverse types as M. croceus and M. flavicollis. Hitherto M. aurantiigula has been recorded only from the coastal districts of East Africa from the Pangani River in northern Tanganyika Territory north to Malindi in Kenya Colony, and inland to Lake Manyara and the plains east of Mount Kilimanjaro in Tanganyika Territory and to the Athi River in Kenya Colony. Consequently it was interesting to find that the Childs Frick Expedition procured a specimen in the Tharaka district north of the Tana River, and east of Mount Kenia, an extension of range of some 150 miles. Furthermore, Donaldson Smith collected another many years before on the Tana River, but this record has apparently remained unpublished. His specimen is now in the collections of the Academy of Natural Sciences of Philadelphia, to which institution I am indebted for the privilege of examining it. I have carefully compared these two northern birds with a series of five from southern Kenya Colony and northern Tanganyika Territory, and find them to be sufficiently different to be worthy of nomenclatural recognition. The northern race may be known as

#### Macronyx aurantiigula subocularis, subsp. nov.

Type.—U. S. Nat. Mus. no. 246154; adult female, collected in the Tharaka district, Kenya Colony, on August 12, 1912, by Edgar A. Mearns.

Subspecific Characters.—Similar to the typical form, but with the posterior half of the superciliary stripes white instead of yellow and with a band of white running from the bill under the eye just dorsal to the black margin of the yellow throat patch. In the nominate form this area is yellow. In size the two forms are alike.

Range.—Known from the Tharaka district and the Tana River.

Material examined.—M. a. aurantiigula, 5 adults; M. a. subocularis, 2 adults.

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